

CLAIMS

1. A floss supply spool, comprising:
 - (a) a hollow core having an inner surface formed with a plurality of ribs or keys extending at spaced intervals from each other; and
 - (b) a length of dental floss wound around said core.
2. The supply spool of claim 1, wherein said keys extend the full height of said core.
3. The spool of claim 2, wherein said core is a cylinder and said keys are formed at circumferentially spaced intervals along an inner cylindrical surface of said cylinder.
4. The spool of claim 3, wherein said keys are formed at equally spaced intervals.
5. The spool of claim 4, wherein a cross section of said hollow core is non-circular.
6. The spool of claim 5, wherein said noncircular cross section is square or rectangular.
7. The spool of claim 5, wherein said noncircular cross section is star shaped.
8. A flossing device to facilitate insertion of floss between teeth, comprising:
 - a. a housing including a fork extension extending from said housing and having a pair of prongs with grooves for guiding said floss in a circuit which stands a space between said prongs.

- b. a floss supply spool rotatably mounted to said housing;
- c. a floss take-up spool rotatably mounted to said housing;
- d. an actuating mechanism for rotating said take-up spool to advance floss within the floss circuit;
- e. a first tensioning mechanism connected to the floss take-up spool to tension the floss during periods when the actuating mechanism is deactivated, said first tensioning mechanism including at least one ratchet pawl engaging a ratchet co-rotatably mounted with the take-up spool; and
- f. a second tensioning mechanism connected to the supply spool to cooperate with the first tensioning mechanism to tension the floss during periods when the actuating mechanism is deactivated.

9. The flosser of claim 8, wherein the actuating mechanism further includes a brake engageable with the second tensioning mechanism to positively lock the supply spool by engaging the tensioning mechanism during periods when the actuating mechanism is deactivated.

10. The flosser of claim 8, wherein said first tensioning mechanism includes a pair of said ratchet pawls engaging said ratchet.

11. The flosser of claim 8, wherein said actuating mechanism includes a ratchet arm pivotally mounted to the housing, a pawl mounted to one end of said ratchet arm, a cam follower connected to the pawl, and a spring biasing the ratchet arm into a home position, said cam follower engaging a cam surface of a trigger in said actuating mechanism, whereby depressing of said trigger causes said pawl and said ratchet arm to pivot about the pivot axis of said ratchet arm, enabling the pawl to engage the ratchet and rotate the same and thereby the take-up spool.